

### **Abstract of the Disclosure**

A power management system for computers compresses contents of system RAM and stores the contents on a non-volatile storage device before  
5 power is suspended to a motherboard, which removes power also from RAM. By compression, the capacity required of the non-volatile storage device is minimized. In a variation, zeros are stored in all RAM area used by memory management software before compression and storage on the non-volatile device. In another variation, areas of RAM used by memory  
10 management software are identified, and only those areas not used by memory management software are stored on the non-volatile device. The capability is provided in several ways in different embodiments.